

Counterbalance, standard poppet type
differential area, counterclockwise adjustment
SUN cavity interchange, T-19A

VBSN-25U-RS

04.52.46 - X - 50 - Z

RE 18320-29

Edition: 07.2023

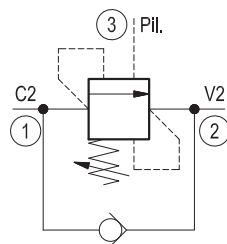
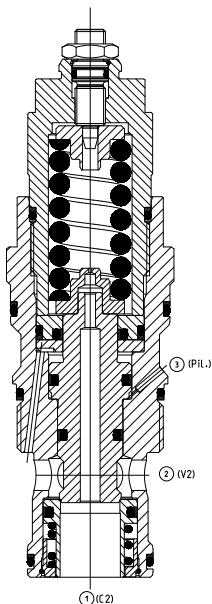
Replaces: 01.2020



Technical data	
Max. operating pressure	350 bar (5000 psi)
Max. flow	480 l/min (127 gpm)
Max. internal leakage ¹⁾	15 drops/min.
Fluid temperature range	-30 to 100 °C (-22 to 212 °F)
Installation torque	475 - 500 Nm (352 - 370 ft-lbs)
Weight	1.7 kg (3.7 lbs)
MTTFD	150 years see RE 18350-51
Cavity	SUN T-19A
Adjustment	according to ISO 4413 with sealed adjustment screw to prevent oil leakage during adjustment
Salt spray test	500h according to DIN EN ISO 9227:2017-07
Lines bodies and standard assemblies	Please refer to section "Hydraulic integrated circuit" or consult factory
Seal kit ²⁾	Code: RG25U9020110100 material no: R930006268
Fluids	Mineral-based or synthetics with lubricating properties at viscosities of 10 to 500 mm ² /s (cSt)
Recommended degree of fluid contamination	Nominal value max. 10µm (NAS 8) / ISO 4406 19/17/14
Installation position	No restrictions
Other Technical Data	See data sheet 18350-50

Description

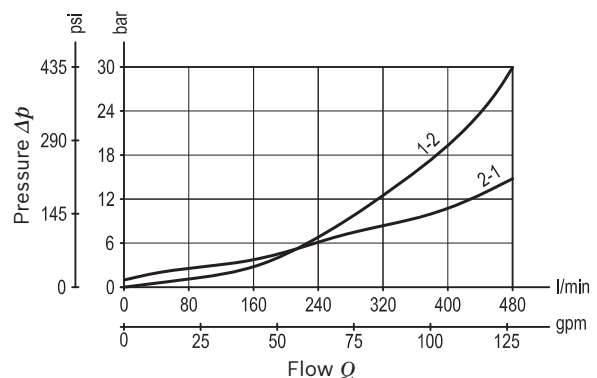
When pressure at 2 rises above the spring bias pressure, the check seat is pushed away from the piston and flow is allowed from 2 to 1. When load pressure at 1 rises above the pressure setting (turn counterclockwise to increase setting - turn clockwise to decrease setting), the direct-acting, differential area relief function is activated and flow is relieved from 1 to 2. With pilot pressure at 3, the pressure setting is reduced in proportion to the stated ratio of the valve, until fully open with free-flow from 1 to 2. Any back-pressure at 2 is additive to the pressure setting in all functions. Valve design prevents spring going solid and complete unscrewing during adjusting.



Pressure setting: at least 1.3 times the load induced pressure and maximum 1.5 times catalogue max nominal setting.

- 1) At 70% of pressure setting
- 2) Only external seals for 10 valves

Characteristic curve



Ordering code

04.52.46	X	50	Z	*	*
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Counterbalance, standard poppet type, differential area, counterclockwise adjustment

Pilot ratio

25 5:1 standard version

50 SUN cavity interchange, T-19A

Series M to Z unchanged performances and dimensions

00 Standard (Buna)
V0 Viton (FKM)

SPRINGS			
	Adj. press. range bar (psi)	Pressure increase bar/turn (psi/turn)	Std. setting bar (psi) cracking pressure
35	70-350 (1000-5000)	99 (1436)	350 (5000)

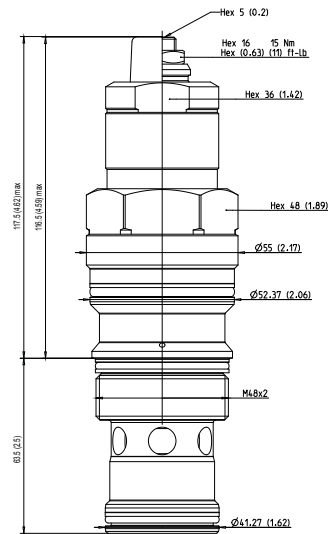
Note: Special settings available with optional tamperproof cap. Contact factory authorized representative for ordering code.

Preferred types

Type	Material number
04524625503500M	R930081297

Type	Material number

Dimensions



Turn adjustment clockwise to decrease setting and release load

OPTION
Protection cap orange
Mat. no. R900168151

Tamper proof cap black
Mat. no. R930092782

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